

**SUBJECT DECISION ON TERMINAL DISCLAIMER INFORMAL FORM**

DATE: 6-11-03

APPL. S.N.: 09/431931

EXAMINER: JACKSON

ART UNIT: 1773

PARALEGAL: *Dyni*

MAILROOM DATE: 5-30

AFTER FINAL: YES NO<sup>X</sup>

NUMBER OF T.D.(S) FILED: 1

**INSTRUCTIONS:** I have reviewed the submitted T. D. with the results as set forth below. If you agree, please use the appropriate form paragraphs identified by this informal memo in your next office action to notify applicant about the T. D. If you disagree any analysis or have questions at all about the acceptability of the T.D., please see our Special Program Examiner or me.

**THIS MEMO IS AN INFORMAL, INTERNAL MEMO ONLY. IT MUST NOT BE MAILED TO APPLICANT, NOR SHOULD A COPY BE LEFT IN FILE. WHEN YOUR OFFICE ACTION IS COMPLETED, YOU MUST INITIAL AND DATE & RETURN THIS TO PARALEGAL.**

- ☒ The T. D. is PROPER and has been recorded. (See 14.23)
- ☐ The T.D. is NOT PROPER and has not been accepted for the reason(s) checked below. (See 14.24)
- ☐ The recording fee of \$\_\_\_\_\_ has not been submitted nor is there any pre authorization in the application to charge to a deposit account. (See 14.25)
- ☐ Application Examiner has not processed fee for T. D.
- ☐ The T.D. does not satisfy Rule 321(b)(3) in that the person who has signed the T. D. has not stated his/her interest and the extent of the interest of the business entity represented by the signature in the application/patent. (See 14.26)
- ☐ The T. D. lacks the enforceable only during the common ownership clause needed to overcome a double patenting Rule 321(c). (See 14.27 and 14.27.1)
- ☐ T. D. is directed to a particular claim(s), which is not acceptable since the disclaimer must be of a terminal portion of the entire patent to be granted, MPEP 1490. (See 14.26 and 14.26.2)
- ☐ The person who signed the terminal disclaimer:
- ☐ has failed to state his/her capacity to sign for the business entity. (See 14.28)
- ☐ is not recognized as an officer of the assignee. (See 14.29.1)
- ☐ No documentary evidence of a chain of title from the original inventor(s) to assignee has been submitted, nor is the frame specified as to where such evidence is recorded in the office. 37CFR 3.73(b). (See 1140 O.G. 72) NOTE: This documentary evidence or the specifying of the reel and frame may be found in the T.D. or in a separate paper submitted by applicant. (See 14.30)
- ☐ No "STATEMENT" specifying that the evidentiary documents have been reviewed and that, to the best of the assignee knowledge and behalf the file is in the assignee seeking to take action 37 CFR 3.73(b). (See 1140 O.G. 72)
- ☐ The T. D. is not signed (See 14.26 and 14.26.3)
- ☐ Attorney is not of record in the oath/declaration or a separate paper filed appointing a new or associate attorney, nor is there a customer number.
- ☐ The serial number of the application (or the number of the patent) which forms the basis for the double patenting is missing or incorrect. (See 14.32)
- ☐ The serial number of this application (or the number of the patent in reexam or reissue case(s) being disclaimed is missing or incorrect. (See 14.26, 14.26.4 or 14.26.6)
- ☐ The period disclaimed is incorrect or not specified. (See 14.27, 14.27.2 or 14.27.3)
- ☐ Other \_\_\_\_\_

09/431931

Independent claims 1, 50, 51, 70, 77, 86, 93

1 - Flexible, thermoplastic, biaxially stretched, heat shrinkable film comprising:

At least one layer having a blend of at least three copolymers

25-85wt% of a 1st polymer having MP = 55 to 95 comprising ethylene/octene-1

5-35wt% of a 2nd polymer having MP = 115 to 128 comprising ethylene/a-olefin

10-50wt% of 3rd polymer having MP = 60 to 110 comprising ethylene/vinyl ester or (meth)acrylic or alkyl acrylate copoly

1st and 2nd polymers have combined weight of at least 50wt%/1-3

shrinkage at 90C of at least 45% in at least one direction

ram puncture force of at least 65N

50 - A biaxially stretched, heat shrinkable film comprising a blend of:

(i) an interpolymer comprising at least an ethylene/octene-1 copolymer and having 1st MP of 55-95, 2nd MP of 115-128

(ii) a polymer having MP of 60 to 110 comprising ethylene/vinyl ester or (meth)acrylic or alkyl acrylate copoly

shrinkage at 90C of at least 45% in at least one direction

51 - Flexible, thermoplastic, biaxially oriented, heat shrinkable film

at least one layer comprising a blend of at least three copolymers

45-85wt% of a 1st polymer having MP = 55 to 95 comprising ethylene/octene-1

5-35wt% of a 2nd polymer having MP = 115 to 128 comprising ethylene/a-olefin

10-50wt% of 3rd polymer having MP = 60 to 110 comprising ethylene/vinyl ester or (meth)acrylic or alkyl acrylate copoly

1st and 2nd polymers have combined weight of at least 50wt%/1-3

shrinkage at 90C of at least 50% in at least one direction

Total energy absorption of at least 0.7 Joule

70 - A biaxially stretched, heat shrinkable film comprising at least 3 layers:

1st layer - blend of at least 3 polymers

1st polymer having MP = 55 to 95 comprising ethylene/octene-1

2nd polymer having MP = 115 to 128 comprising ethylene/a-olefin

3rd polymer having MP = 60 to 110 comprising ethylene/vinyl ester or (meth)acrylic or alkyl acrylate copoly

2nd layer - vinylidene chloride copolymer, nylon or evoh

3rd layer - at least 50wt% copoly of ethylene/a-olefin or vinyl ester or blends thereof

maximum ram puncture force of at least 65N

Total energy adsorption of at least 0.5 Joule

shrinkage at 90C of at least 45%

77-84 102-

77 - Polymer blend of at least 3 copolymers

25-85wt% of a 1st polymer having MP = 55 to 95 comprising ethylene/octene-1  
5-35wt% of a 2nd polymer having MP = 115 to 128 comprising ethylene/a-olefin  
10-50wt% of 3rd polymer having MP = 60 to 110 comprising ethylene/vinyl ester or (meth)acrylic or alkyl acrylate copoly  
1st and 2nd have combined weight of at least 50wt%

86 - A process for making biaxially stretched, heat shrinkable film comprising:

extruding a melt plastified primary tube comprising above polymer blend (77)  
cooling said primary tube  
reheating said cooled tube to a draw point temp of 65-88C  
biaxially stretching said tube to a circum of 2.5 times circum of primary tube  
cooling said stretched tube

93 - A biaxially stretched, heat shrinkable, multilayer film having at least 4 layers

1st layer - heat sealing surface, polymer or blend selected from:

at least 50wt% propene copoly(eth, but, methylpent, hex, oct, or mix with at least 60% prop  
at least 50wt% ethylene copoly(prop, but, methylpent, hex, oct, or mix, MP=at least 105, P=at least 0.9

2nd layer - blend of

25-85wt% of a 1st polymer having MP = 55 to 95 comprising ethylene/octene-1  
5-35wt% of a 2nd polymer having MP = 115 to 128 comprising ethylene/C4-C8  
10-50wt% of 3rd polymer having MP = 60 to 110 comprising ethylene/vinyl ester or (meth)acrylic or alkyl acrylate copoly  
1st and 2nd have combined weight of at least 50wt%

3rd layer - at least 80wt% of EVOH or vinylidene chloride copolymer with 2 to 20wt% VC or MA

4th layer - (a) 10-85wt% of ethylene/C3-C8, MP=55-98

(b) 5 to 60wt% of ethylene/C4-C8, MP=115 to 128

(c) 0-50wt% ethylene/vinyl ester, (meth)acrylic acid, or alkyl acrylate, MP=60 to 110C

1st and 2nd have combined weight of at least 50wt%

shrinkage at 90C of at least 40% in at least one direction

tensile seal strength of least 400 g/cm at 88C

Without teach a blend of:

at least 10 wt%, preferably 20-35wt%, of 1st polymer - ethylene/C3-C10, MP=55-75  
at least 10wt%, preferably 25-60wt%, 2nd polymer - ethylene/C3-C10, MP=85-110  
at least 10wt%, preferably 1-30wt%, of 3rd polymer - ethylene/C3-C10, MP=115-130  
about 10-30wt% of 4th polymer - ethylene/unsaturated esters, MP=80-105  
all mps fall within except for 129-130 of 3rd polymer (~2nd of instant)

Applied to independent 77 and 86

Maintain

77-81 + 84 1025

86, 87, 89, 92?

89 = 11

Said blend comprises at least 50% of said 1st copoly

overlap

25-35

25-30

10-30